

KLECHKOVSKIY, V.M.

CA

3

Electron groups in atoms. Y. M. Kirzhnits, *Dokl. Akad. Nauk S.S.S.R.* 66, 1175 (1960) *ibid.* 66, 1346. --Only in 3 cases, $1s$ and Ne , does inert-gas structure correspond to complete occupancy of all levels with a given principal quantum no. n . On the other hand, occupancy of all levels of a given n does not necessarily produce a closed inert envelope. As an example, the fully occupied shell with $n = 3$ in Cu is not closed or inert, nor is the fully occupied shell with $n = 4$ in Yb . There exists, consequently, a contradiction between the concept of an electron group as a closed configuration, and its definition as the whole of the

electrons with a given n . This contradiction is further illustrated by the anomalies in the sequence of filling of s levels: these deviations appear anomalous only from the point of view of grouping of electrons by a given n . They disappear if the building up of electron shells is based not on n , but on the sum $(n + l)$. This is illustrated by a table of the elements $1s, He, Ne, Mg, Ar, Ca, Zn, Kr, Sr, Cd, Xe, Ba, Yb, Hg, Ra, Rn$. An externally closed electron group is defined as the whole of the electrons occupying the s levels of one $(n + l)$ group and all the levels, except the s level, of the following $(n + l)$ group (i.e. of the group with $n + l$ greater by unity). Only in 3 cases does the new definition coincide with the classic definition, namely for the $1st$ and $2nd$ electron groups. In all other cases, there is a definite divergence. The $2nd$ electron group is formed by s electrons of the $n + l = 3$ group and the p electrons of the $n + l = 4$ group; the $4th$ group is formed by the s electrons of the $n + l = 6$ group and all the d and p electrons of the $n + l = 5$ group, etc. N. Tamm

1. KLECHKOVSKIY, V. M.

2. USSR (600)

4. Atoms

7. (n,l)-groups of terms in spectra of alkali. Dokl. AN SSSR, 86, No. 4, 1952

Concludes from previous studies (see DAN USSR, Vol 80, No 4, 1950 and Vol 83, No 3, 1952; Zh ETf Vol 23, No 1, 1952) that an electron joining a singly ionized atom of any element ($X^+ + e^- \rightarrow X$) occupies in ground state a level equivalent to the least sum of main and orbital quantum numbers. The only exception is Pd. Presented by Acad. N.N.Smirnov 6 Aug 52.

252T94

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

KLECHOVSKIY, V.M.

Physics

2 ①

chem also VVS
1-25-54
General & Physical
Chemistry

The mechanism determining the length of the periods in the Mendeleev system. V. M. Klechkovskiy. *Izv. Akad. Nauk SSSR Khim. (Moscow)* No. 1, (3), 169-70 (1962). — Analysis is made of the classical concept of the structure of the periodic system as expressed by the equation $L = 2n^2$, where L is the length of the period and n the primary quantum no. In the first 3 periods only does the length (the no. of elements in the period) correspond to $2n^2$. The modifications of this equation are analyzed; their shortcomings are pointed out, especially those of the theory of Pauli, and a series of equations is presented to show that the relation of the no. of the period to its length may be derived theoretically from the data of the assoc. of the quantum levels, the filling in of which takes place in a series of elements that make up the period. I. S. Telle

KLECHKOVSKIY, V.M.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Soils and Fertilizers

2
② 920
Isotopic method and its application in agriculture.
V.M. Klechkovskiy. *Izv. Vsesoyuzn. Nauchn. Tsentr. Ser. Khim.*
Abst. 1953, No. 3 (Whole No. 4) 93-132.—A review of the
application of isotope techniques in the study of plant-soil
relations. 98 references.
J. S. Joffe

86-244151

KLECHKOVSKIY, V.M.

62 ✓ The succession of terms in the spectra of polyelectronic atoms. V. M. Klechkovskiy. *Zhur. Eksp. i Teor. Fiz.* 25, 179-87 (1953); cf. C.A. 49, 11203g. — The spectra of Na, 25, 179-87 (1953); cf. C.A. 49, 11203g. — The spectra of Na, Mg, K, Ca, Cu, Zn, Rb, Sr, Ag, Cd, Ce, Ba, Au, and Hg were investigated. It is shown that in the region which includes the basic state and some associated close to the excited states of neutral polyelectronic atoms, the energy levels are arranged in a succession which corresponds to the growing values of the sum $(n + l)$, where n is the main and l is the orbital quantum no. of the emitting electron. Thus, if one arranges the quantum levels according to the sum of the main and orbital quantum nos., there will appear a connection between the earlier found (C.A. 46, 13464, 7868d; 47, 8111b; 48, 8039e) consecutiveness of the filling-in of the electrons of the $(n + l)$ group in the periodic system and the consecutiveness close to the basic terms in the spectra of polyelectronic atoms. Werner Jacobson

KLECHKOVSKIY, V. M.

USSR/Chemistry - Periodic System

Aug 53

"The Theory Concerning the Number of Elements in a Period of D. I. Mendeleev's System," V. M. Klechkovskiy, Agric Acad in K. A. Timiryazev

Zhur Fiz Khim, Vol 27, No 8, pp 1251-1255

As Mendeleev's number for the elements increases, the electrons fill the quantum levels successively from the groups having the least value for the sum of the main and orbital quantum numbers (n and l) to groups having a greater value for $n + l$. In each period filling with electrons of the s -level

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having a value of $n + l$ equal to the number of the period takes place and of all levels with values of $n + l$ except s , exceeding by unity the number of the period. The number of elements in a period is equal to the max number of electrons capable of occupying the aggregate of quantum levels mentioned above without violating Pauli's principle.

USSR 4

539.153
5335. On the formulation of rules for the filling of
electron levels. V. M. Kuznetsov. Dokl. Akad.
Nauk SSSR, 91, No. 5, 925-4 (1953) in Russian.
English translation, U.S. National Sci. Found. NSF-tr-
220.

A further discussion of the rule previously sug-
gested by the author (Abstr. 3526 (1953)), according
to which the filling of quantum levels proceeds accord-
ing to increasing values of $n + l$, and, within a group of
constant $n + l$, according to increasing values of n .
Predictions of this rule are, in particular, compared
with results of the application of Fermi statistics with
exchange correction.

BB L. PACHENIS
q

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723010013-4

SECRET

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723010013-4"

KLECHKOVSKIY, V.M.

USSR .

1124. On the first electrons with a given l in a neutral atom. V. M. KLECHKOVSKIY, Letter in Zh. eksper. teor. Fiz., 26, No. 6, 760-1 (1954) In Russian

A new expression for Z_l is derived from an earlier formula [Abstr. 3526 (1951)]; l is the orbital quantum number and Z_l the atomic number of the element for which l electron with given l occupies the electron-shell in a neutral non-excited atom. For $l = 0, 1, 2$ agreement is found with experiment, for higher l values complete agreement can be obtained in terms of ZL . Hence expressions can be obtained representing the structural changes in the electron-shells with increasing Z .

J. JACQUES

LB

KLECHKOVSKIY, V. M.

USSR/Physics - Nuclear Physics

Card 1/1

Author : Klechkovskiy, V. M.
Title : About relation between the Z and the number of s, p, d, and f-electrons in an atom.
Periodical : Dokl. AN SSSR 95, 6, 1173 - 1176, 21 Apr 1954
Abstract : On the basis of the law of successive completion of $(n + 1)$ groups of electrons, the article formulates a relation between the Z (atomic number) and the N₀ (number of electrons occupying quantum levels in a neutral unexcited atom, according to an orbital number 1). Diagrams and formulas and a table are in the article.
Institution : Acad. of Sci. of the USSR
Submitted : 15 Feb 1954

KLECHKOVSKIY, V. M.

"The Use of Tracer Atoms in Studying the Application of Fertilizers," a paper presented at the Atoms for Peace Conference, Geneva, Switzerland, 1955

K. ECH: AVSKY, V. M.

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour: Ref Zhur-Biol., No 8, 1958, 34367.

Author : Klechkovskiy, V. M.
Inst : Moscow Agricultural Academy imeni K. A. Timiryazov.
Title : Isotopes in Agriculture.

Orig Pub: Dokl. Mosk. s.h. Akad. im. K. A. Timiryazova,
1956, 1, No 26, 13-22.

Abstract: By means of the radio isotope of phosphorus, it was possible to expose the predominance of fine granules in the beginning of plant growth and of larger ones in the following periods of vegetation. This method established the following points:
1. Data of introduction of the dressing; 2. Time between the period of applying the dressing and beginning of intensive consumption of nutrit-

Card 1/4

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour: Ref Zhur-Biol., No 8, 1958, 34367.

Abstract: five matters contained in said ad-feeding; 3. Velocity and amplitude of utilization of fertilizers, introduced at various depths; 4. Importance of disposition of fertilizers in relation to the plant; 5. Assimilation of elements from soil, which enables to clarify the conditions, under which the placement of fertilizers will increase the ability of plants to utilize best the natural fertility of soil; 6. Assimilation by plants of mineral matters through leaves. Experiments with isotopes of calcium, sulfur, and cobalt are showing under what conditions a positive action of cobalt fertilizers can be expected; the importance of liming with regard to the supply of calcium to plants; the influence of liming on utilization

Card 2/4

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Card 3/4

Klechkovskiy, V.M.
USSR/Atomic and Molecular Physics - Atomic Physics

D-1

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8933

Author : Klechkovskiy, V.M.

Title : Concerning the First Appearance of the Atomic Electrons with
Data ℓ , n , n_r and $n + \ell$.

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 30, No 1, 199-201

Abstract : Developing the work in Referat Zhur Fizika, 1955, 13587,
further rules are obtained for the order with which the
atomic levels are filled.

Card : 1/1

KLECHIKOVSKIY, V. M. and GULYAKIN, I. V.

"Behavior of microquantities of strontium, cesium ruthenium and zirconium in the soil and in plants according to the data obtained in the studies with the application of the radio-active isotopes in these elements," a paper submitted at the International Conference on Radioisotopes in Scientific Research, Paris, 9-20 Sep 57.

BLECHOVSKIY, V. M.

10966 On the Behavior of Radioactive Tracer in Soil These Observations by Blechovskiy, V. M. 1966 10966 On the Behavior of Radioactive Tracer in Soil These Observations by Blechovskiy, V. M. 1966 10966 On the Behavior of Radioactive Tracer in Soil These Observations by Blechovskiy, V. M. 1966

CATEGORY : CULTIVATED PLANTS. General Problems M
 ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO. 4, 1959, No. 15554
 AUTHOR : Klechkovskiy, V.M.
 INST. : Not given
 TITLE : Radioactive isotopes in Agricultural Science.

ORIG. PUB. : Mezhdunar. n.-kh. zh., 1957, No. 1, 14-25

ABSTRACT : General survey of the application of methods using artificial-radioactive and stable isotopes for investigations in agriculture. Examples are cited of the value of isotope research methods in determining the mechanism of photosynthesis, the cycle of biochemical reactions, the uptake (of carbon dioxide in plants through the roots, the nature of the interconnection between the activity of the roots and the above-ground organs of plants, the

CARD: 1/3

CATEGORY : CULTIVATED PLANTS

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723010013-4

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO. 4, 1959, No. 15554

AUTHOR :
 INST. :
 TITLE :

ORIG. PUB. :

ABSTRACT : travel and exchange of substances between the soil and rootstock, the fixation of N in the tubers of leguminous plants and so forth) and the value of employing isotope P^{32} . The author indicates the necessity of finding methods of determining the limits of indicator tolerant and harmful doses of radioactive isotopes in connection with the diversity of dosimetric conditions of experiments, of studying the possibility of growth

CARD: 2/3

A1
 The distribution of atomic electrons. V. M. Kharchuk.
 Izvest. Vsesoyuzn. nauchn. Akad. 1937, No. 1,
 100-118; cf. C.A. 31, 7127c. — The various concepts of the
 electron distribution of the elements are reviewed. The
 theory of the ideal system of elements could not be a satis-
 factory basis for a detailed analysis and rational theoretical
 detn. of the relation between the at. nos. of the elements
 (and, therefore, their position in the periodic table) and the
 distribution of at. electrons. In his earlier work (C.A. 46,
 7808A) K. claims to have shown the possibility of solving the
 problem on the basis of a law that generalizes the factual
 data on the distribution of the at. electrons in relation to the
 actual structure of a real periodic system of all the elements
 in its entire range. The expression that characterizes the re-
 lation of the at. nos. of the elements and the distribution of
 at. electrons is described systematically, on the basis of earlier
 work. This report is limited to an analysis of the electron
 configuration of the neutral form of the various elements in
 the fundamental unexcited condition. The law of successive
 charging of $(n + 1)$ groups is considered. J. S. J.

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77415

Author : ~~Klochkovskiy, V. M.~~

Inst : Timiryazev Agricultural Academy

Title : The Use of Isotopes and Nuclear Radiation in Agronomical Investigations

Orig Pub : Izv. Timiryazovsk. s.-kh. akademii, 1957, No 3, 6-32

Abstract : As a result of the use of isotopes, new theoretical ideas are established concerning such a process as photosynthesis; the part is revealed which carbon dioxide plays in the roots of plants in the formation of acceptors, necessary for the assimilation of mineral compounds of N and the synthesis of aminoacids; now data is obtained on the interaction between photosynthetic mineral nutrients and the synthetic activity of the root system. With the use of C^{14} and N^{15} , the intensive metabolism and renewal of proteins

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USSR / Soil Science. Mineral Fertilizers.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723010013-4

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77415

and chlorophyll in plants is established, as well as the indication that the fixation of N with beans originates not in the cells of the bacteria radicicola but in the tissues which surround the tuber. In a great number of tests with tagged superphosphate, it is shown that the introduction of phosphates with lime impairs, but with organic substance improves, the utilization of P by plants; in addition, it is found that, for an increase of assimilation by plants of P, much smaller doses of organic fertilization are sufficient than are commonly recommended. The use of the isotopic method permitted obtaining new data with the study of non-root nutrition of plants through leaves. The use of microfertilizers that contain isotopic tagging (Co, Zn, Mo, Mn and others), gives a possibility of broadening and deepening our knowledge of the role of micro-elements in the life of plants. With the utilization

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USSR / Soil Science. Mineral Fertilizers.

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Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77415

difference of the rate of entrance into the plant of radioactive and nonradioactive isotopes was not observed. In tests of the study of the effect of ionized radiation on a plant, it was shown that in the early phases of growth, plants are less resistant to the harmful effect of radiation. It is established that the sensitivity of plants to the harmful effect of radiation depends to a great degree on the conditions of nutrition and other external factors. For example, plants which sustain an insufficiency of P are much more sensitive to the harmful effect of P^{32} than plants well supplied with this element. During a study of the problems relating to the agrochemistry of products of separation, it was shown in the author's laboratory that with the entrance of radiothorium into the plant through the root, the radioactivity of the organs above the earth proves to be almost wholly the specific accumulation in them

Card 4/6

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77415

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723010013-4

of short-lived filial products of the decay of thorium X and thorium B, and the maternal radioisotope of the radiothorium is held back in the roots in a significant quantity and almost does not enter at all in the organs above the earth. Analogous to this, it was shown that the maternal Sr outstrips the filial Y in entrance into the plant through the root system from soil that contains absorbed Sr^{90} and Y^{90} in equal relation. However, with the further removal (for example, from the lower leaves to the upper) of the radioisotopes $Sr^{90} + Y^{90}$ from the plants organs formed earlier, in which the maternal Sr^{90} is together with filial Y formed in the process of decay, a relatively great movement of the filial short-lived isotope Y is observed. In the last few years, numerous tests have been described in the literature in which a speed-up of growth development and an increase of the harvest of plants under the effect of

Card 5/6

KLECHKOVSKIY, V. M.

~~KLECHKOVSKIY, V. (M)~~

Use of isotopes and irradiation in agriculture. Atom energ. 2
no. 4:389-390 Ap '57. (MIRA 10:6)
(Wageningen, Netherlands--Radioactive tracers--Congresses)

KLECHNOVSKIY, V. M., TSELISHEVA, G. N. and SOKOLOVA, L. N.

"Sorption of Tracer Amounts of Strontium and Cesium in Soils."

paper to be presented at the 2nd X UN Intl.' Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sept 58.

KLECHKOVSKIY, V.N., akademik, otvetstvennyy red.; **ANTIPOV-KARATAYEV, I.N.**, akademik, otvetstvennyy red.; **NICHIPOROVICH, A.A.**, doktor biol. nauk, otvetstvennyy red.; **MEDVEDEV, Kh.A.**, kand. biol. nauk, red.; **OGOLNITS, Ya.G.**, red.; **POLYAKOV, Yu.A.**, kand. sel'skokhozyaystvennykh nauk, red.; **SUKHOV, G.V.**, red.; **SHIRSHOV, V.A.**, kand. sel'skokhozyaystvennykh nauk, red.; **SHAROVATOVA, I.B.**, red. izd-va.

[Physiology of plants. Agricultural chemistry. Soil science; proceedings of the Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and in Science]
Fiziologiya rastenii. Agrokhimiya. Pochvovedenie; trudy
Vsesoyuznoi nauchno-tekhnicheskoi konferentsii po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheni v narodnom khoziaistve i nauke. Moskva, Izd-vo Akad. nauk SSSR, 1958. 436 p. (MIRA 11:6)

1. Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheni v narodnom khozyaystve i nauke. 1957. 2. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I. Lenina (for Klechkovskiy).
3. Akademiya nauk Tadzhikskoy SSR (for Antipov-Karatayev).
(Botany--Physiology) (Agricultural chemistry) (Soils)

KLECHKOVSKIY, V.M.; GULTAKIN, I.V.

Behavior of minute quantities of strontium, caesium, ruthenium,
and zirconium in soils and plants [with summary in English].
Pochvovedenie no.3:1-16 Mr '58. (MIRA 11:4)

1. Sel'skokhozyaystvennaya akademiya im. K.A. Timiryazeva.
(Minerals in soil) (Plants--Assimilation)

KLECHANSKIY, V.M.

Founder of the Soviet agricultural chemistry; on the 10th anniversary of D.N. Prishnikov's death. Izv. TSKhA no. 3:17-28 '58.

(MIRA 11:7)

1. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I. Lenina.

(Prishnikov, Dmitrii Nikolaevich, 1865-1948)

KLECHOVSKIY, V.M.

Modification of the system of values which characterize the electronic configuration of an atom (with summary in English). Izv. TSKhA no.5:223-236 '58. (MIRA 11:11)

(Atoms)

sov/58-59-10-22317

Translation from: Referativnyy Zhurnal, Fizika, 1959, Nr 10, p 78 (USSR)

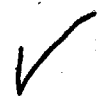
AUTHOR: Klechkovskiy, V.M.

TITLE: The Deficit of Filling Some Finite Quantum-Level Sets and Its Z-Dependence

PERIODICAL: Dokl. Mosk. s.-kh. akad. in. K.A. Timiryazeva, 1958, Nr 39, pp 258-263

ABSTRACT: The author conceives of the filling deficit of a certain finite set of quantum levels with a given value of the quantum numbers as the number of free nonidentical quantum states (levels), unoccupied by electrons, that occur in the range of the corresponding set or subset of the levels. He studies the dependence of the filling deficit on nuclear charge Z . Appropriate formulas are worked out for a series of combinations of the principal and orbital quantum numbers.

Ye.Ya.L.



Card 1/1

KLECHKOVSKIY, V. M. and I. V. GULYAKIN

"Entry of Radioactive Strontium Into Plants and Accumulation of It in the Harvest of Various Agricultural Crops."

Soviet Scientists Concerning the Dangers of Nuclear-Weapon Tests, p. 53,
Publishing House of the Main Administration for the Use of Atomic Power,
Council of Ministers USSR, Moscow, 1959.

KLECHKOVSKIY, V.M.

Hypothetical electron configurations of the actinide elements.
Izv. TSKhA no. 6:185-200 '59. (MIRA 13:6)
(Actinide elements)

S/058/61/000/010/026/100
A001/A101

AUTHOR: Klechkovskiy, V.M.

TITLE: Distribution of orbital momentum in the group model of the atom

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 121, abstract 10V2
("Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva", 1960, no. 57, 145-151)

TEXT: The author introduces the concept of the group model of the atom in which distribution of electrons in quantum levels satisfies the rule of consecutive filling of the $(n+1)$ groups (RZhFiz, 1957, no. 4, 8933). A semi-empirical dependence was found between the nuclear charge Z and the mean value of orbital momentum square L^2 for the ground state of the atom. It is shown that with an increase of Z , changes of L^2 are of a periodic form, which is closely connected with the consecutive filling of the $(n+1)$ groups. Completion of filling the $(n+1)$ group at Mg ($n+1 = 3$), Ca ($n+1 = 4$), Sr ($n+1 = 5$), Ba ($n+1 = 6$) and Ra ($n+1 = 7$) correspond to minima in the graph $L^2 = f(Z)$. The limits of Z ranges are determined, within which the relative stability of L^2 is observed.

Ye. Pshenichnov

[Abstracter's note: Complete translation]

Card 1/1

86050

S/020/60/135/003/036/039
B004/B060

24.6100 (1043 only)
AUTHOR: Klechkovskiy, V.M.

TITLE: Characteristics of the Type of Electron Configuration of
Atoms

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 3, pp. 655-658

TEXT: The author tried to find a quantity which is a function of the electron distribution in the ground state of the atom and has the same value for elements being electron analogs. The following is defined: N_{n+1} is the number of electrons which in the atom occupy levels with a given value of the principal and orbital quantum number. E_{n+1} is the number of quantum states unoccupied by electrons, viz., the electron deficiency of the $(n+1)$ group. ξ_{n+1} is the electron deficiency of such $(n+1)$ groups in which occupation has already begun: $\xi_{n+1} = E_{n+1}$, if $N_{n+1} > 0$ (1). A "configuration index E_k is defined: $E_k = \sum \xi_{n+1}$. Summation is done over all values for

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Characteristics of the Type of
Electron Configuration of Atoms

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B004/B060

$n+1$ for which, corresponding to (1), $N_{n+1} > 0$. ξ_k is the number of electrons lacking in the atom for a complete occupation of all $(n+1)$ groups, whose occupation has already begun. The mathematical dependence of ξ_k on Z is defined: y stands for a parameter assuming integral values only, and satisfying the condition:

$$y^3/6 + y(0.5\cos^2 0.5\pi y - 1/6) < Z \ll (y+1)^3/6 + (y+1)(0.5\sin^2 0.5\pi y - 1/6)$$

(3). Therefrom follows:

$$\xi_k = (y+1)^3/6 + (y+1)(0.5\sin^2 0.5\pi y - 1/6) - Z \quad (4).$$

The binomial $(y+1)^3/6 + (y+1)(0.5\sin^2 0.5\pi y - 1/6)$ on the right-hand side of (3) and (4) is the number of nonidentical quantum states with all $n+1$ values which do not exceed $n+1 - y$. The analogous binomial on the left side of (3) expresses the nonidentical quantum states with all values of $n+1$ which are smaller than y . The following values for ξ_k are given in

Table 1.

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Characteristics of the Type of Electron Configuration of Atoms

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S/020/60/135/003/036/039
B004/B060

ξ_k	Element	ξ_k	Element	ξ_k	Element
0	He, Be, Mg, Ca, Sr, Ba, Ra	11	Co, Rh, Ir	22	Dy, Cf
1	H, Li, Na, K, Rb, Cs, Fr	12	Fe, Ru, Os	23	Tb, Bk
2	Ne, Ar, Kr, Xe, Rn,	13	Mn, Tc, Re	24	Gd, Cm
3	F, Cl, Br, I, At	14	Cr, Mo, W	25	Eu, Am
4	O, S, Se, Te, Po	15	V, Nb, Ta	26	Sm, Pu
5	N, P, As, Sb, Bi	16	Ti, Zr, Hf	27	Pm, Np
6	C, Si, Ge, Sn, Pb	17	Sc, Y, Lu	28	Nd, U
7	B, Al, Ga, In, Tl	18	Yb, (102)	29	Pr, Pa
8	Zn, Cd, Hg	19	Ta, Nb	30	Ce, Th
9	Cu, Ag, Au	20	Er, Fm	31	La, Ac
10	Ni, Pd, Pt	21	Ho, E		

In the same way as Z clearly defines the atom as an element, regardless of isotopic differences as to mass number, radioactivity, and other nuclear properties, ξ_k clearly characterizes the type of electron configuration regardless of differences in the grouping of these electrons between d- and s-, or d- and f-, subgroups. There are 1 table and 7 ref-
Card 3/4

66050

Characteristics of the Type of
Electron Configuration of Atoms

S/020/60/135/003/036/039
B004/B060

ferences: 7 Soviet, 1 US, 1 British, and 1 French.

PRESENTED: March 26, 1960 by V.N. Kondrat'yev, Academician

SUBMITTED: March 22, 1960

Card 4/4

KLECHKOVSKIY, V.M.

Configuration index of the electronic structure of normal
atoms. Izv. TSKHA no.3:161-176 '61. (MIRA 14:9)
(Atoms) (Electrons) (Configurations)

KLECHKOVSKIY, V.M.

Transformation of Tiets's formula for the number of filled
l-subgroups in the statistical model of the atom. Izv.vys.ucheb.
sav.; fiz. no.4:37-39 '61.

(MIRA 14:10)

1. Moskovskaya sel'skokhozyaystvennaya akademiya imeni K.A.Timiryazeva.
(Nuclear models)

S/058/62/000/007/027/068
A061/A101

AUTHOR: Klechkovskiy, V. M.

TITLE: On the course of $(n+1)$ -group filling in the statistical atomic model

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1962, 1, abstract 7V3 ("Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva", 1961, no. 64, 163 - 168)

TEXT: The so-called group model of atoms in which the electron-distribution is predicted by the rule of successive $(n+1)$ -group filling, has been developed to explain the stepped character of the relationship between the number, N_1 , of electrons filling levels with a given orbital quantum number l in a neutral nonexcited atom, and the nuclear charge Z . The limiting values of Z , calculated on the basis of the statistical atomic model, determine the succession of filling of the $(n+1)$ -groups containing sets of quantum levels, which include all subgroups with an equal sum of principal and orbital quantum numbers. It is shown that the expressions obtained for the limiting values of Z in the statistical atomic model approach, as to their form, the corresponding expressions for the limiting

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On the course of...

S/058/62/000/007/027/068
A061/A101

values of Z, found by the author earlier on the basis of the atomic group model from the rule of the successive (n+1)-group filling.

B. Kerimov

[Abstracter's note: Complete translation]

Card 2/2.

KLECHKOVSKIY, V.M.

($n + 1$)-Groups in a Thomas-Fermi model. Opt. i spektr. 12 no.3:
434-437 Mr '62. (MIRA 15:3)
(Quantum theory) (Nuclear optical models)

5/081/63/000/001/001/061
B101/B186

AUTHOR:

K1
Kuchkovskiy, V. M.

TITLE:

A new form of expressing the dependence between Z and the number of s-, p-, d-, and f-electrons in the statistical model of the neutral atom

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 1, 1963, 6, abstract B10
(Dokl. Mosk. n.-kh. akad. im. K. A. Timiryazeva, no. 70, 1961, 116 - 125)

TEXT: The expression for the limits of population of $(n+1)$ groups, which was found by the author on the basis of the statistical model (RZhKhim, 1962, 21B3; 21B4), is related in its mathematical form to the description of the same limits derived from the rule of consecutive population of $(n+1)$ groups, although the coincidence is not complete. This study sets out to confirm the assumption made in the above mentioned papers that the coincidence between these two expressions for the limits of population of $(n+1)$ groups can be improved by introducing corrections for the integer character of Z on the basis of the statistical model used to solve the problem of relationship between Z and the electron number, populating the
Card 1/2

A new form of expressing the...

3/081/63/000/001/001/061 -
B101/B186

levels with a given value for the orbital quantum number $l(N_1)$, and by taking into account the condition that Z is equal to the total of electrons in the neutral atom. It is shown that the Tietz formula which describes the dependence of Z on the number of s-, p-, d-, and f-electrons in the statistical Thomas-Fermi model does not satisfy the condition of neutrality of the atom. A method is suggested for introducing a statistical correction in the description of the dependence of N_1 on Z where the equality between Z and the total number of electrons in the neutral atom is maintained. A new form was obtained for expressing the dependence of Z on the number of s-, p-, d-, and f-electrons in the statistical model, which corresponds to the conservation of the equality mentioned. The new form of expressing the dependence of N_1 on Z in the statistical model agrees exactly with the rule stating that with increasing atomic number the electron levels are populated in correspondence with the growing values of the principal and orbital quantum numbers. [Abstractor's note: Complete translation.]

Card 2/2

KLECHKOVSKIY, V.M., akademik; SELETKOVA, N.I., mladshiy nauchnyy sotrudnik

Isotopic effects of plant uptake of calcium. Izv.TSKHA no.4:69-
78 '62. (MIRA 15:12)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni
Lenina (for Klechkovskiy).
(Calcium—Isotopes) (Plants—Assimilation)

L 10032-63

ENT(1)/HDS--AFFTC/ASD--P1-4

ACCESSION NR: AR3000352

S/0058/63/000/004/D001/D001

SOURCE: RZh. Fizika, Abs. 4D2

AUTHOR: Klechkovskiy, V. M.

TITLE: Concerning the distribution of the orbital momentum in the statistical model of the atom, \

CITED SOURCE: Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, vyp. 79, 1962, 227-233

TOPIC TAGS: atomic physics, orbital momentum, statistical model

TRANSLATION: A connection is established between the atomic number of an element with the average value of the square of the orbital momentum in the statistical theory of the atom. It is shown that this dependence is periodic.

DATE ACQ: 14May63

ENCL: 00

SUB CODE: PH

bm/kl
Card 1/1

KLECHKOVSKIY, V.M.

First n, l -electrons in the statistical atom model. Izv. vys. ucheb.
zav; fis. no.1:43-48 '63. (MIRA 16:3)

1. Moskovskaya sel'skokhozyaystvennaya akademiya imeni
K.A.Timiryazeva.

(Electrons)

(Nuclear models)

KLECHKOVSKIY, V.M.

Comparative evaluation of two variants of the solution to the
problem of electron distribution in the statistical model of
the atom. Izv. vuzov. fizika. 1977; 20(10):1-7. (U.S.)

(MIRA 1748)

1. Moskovskaya fizicheskaya voprosivnaya akademiya. Izv. 1977;
10:1-7.

PETERBURGSKIY, A.V., prof.; ASAROV, Kh.K., dots.; PLESHKOV, B.P.,
dots.; SMIINOV, P.M., dots.; VOROB'YEV, F.K., dots. [deceased];
GULYAKIN, I.V., prof.; YUDIN, F.A., dots.; KLECHKOV, I.Y.,
V.M., akademik, red.; SHLEPANOV, V.M., red.

[Agrochemistry] Agrokhimiia. Moskva, Kolos, 1964. 527 p.
(MIRA 18:1)

KLECHKOVSKIY, V.H.

Normalization of the electron distribution function in a statistical model of the atom. Izv. TSKHA no.6:267-272 '64
(MIRA 18:1)

PLESHKOV, Boris Pavlovich; KLECHKOVSKIY, V.M., akademik; OZEROV,
V.N., red.; SHLEPANOV, V.M., red.

[Biochemistry of agricultural plants] Biokhimiia sel'sk-
khoziaistvennykh rastenii. Moskva, Kolos, 1965. 446 p.
(MIRA 18:8)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk
imeni V.I.Lenina (for Klechkovskiy).

L 27857-66 BR(1)
ACC NR: AP5022869

SOURCE CODE: UR/0051/65/019/003/0441/0443

AUTHOR: Klechkovskiy, V. M.

ORG: None

TITLE: The consecutive filling rule for $(n + l)$ -groups and the multiplicity of the ground term of atoms

SOURCE: Optika i spektroskopiya, v. 19, no. 3, 1965, 441-443

TOPIC TAGS: atomic spectrum, atomic structure, electron energy level, quantum number

ABSTRACT: It is shown that a simple mathematical description can be obtained for the periodic relationship between the atomic number of an element, the type of electron configuration, and the multiplicity of the ground term of a neutral atom by using a general rule previously derived by the author (ZhETF v. 23, 115, 1952 and earlier) for the consecutive filling of the electronic levels of atoms with increasing atomic number, effected by grouping the quantum levels and using the sum of the principal and orbital quantum numbers. Check calculations have shown that the relation derived from this rule between Z and the multiplicity of the ground term of the atoms is correct for almost all elements, and only for Cr, Nb, Mo, Pd, and Gd are there any discrepancies between the theoretical and the empirical values. These discrepancies are connected with the fact that in these elements the distribution of the electrons in the ground state of the atom does not coincide strictly with the distribution predicted by the rule for consecutive filling of $(n + l)$ groups. A similar discrepan-

Card 1/2

UDC: 539.183.3

KLECHNIOWSKI, Roman (Warszawa)

Work accidents in the construction industry and personal protective equipment. Przegl budowl i bud mieszk 34 no.7:407-408 J1 '62.

KLECHNIOWSKI, Roman (Warsawa)

Labor accidents in construction. Przegl budowl i bud mieszk
34 no.10:603 0 '62.

KLECHKA, A. [Klecka, A.], inzh.

Video telephone. Nauka i zhizn' 28 no.5:41 My '61. (MIRA 14:6)
(Czechoslovakia--Telephone)

CA

11F

Living matter and metabolism. A. Klebs, 174418
Cribbier. 1844. ZruidHil 23, 99-110 (1911). A review
Jan Miska

A. KLECKA

"Possibilities and ways of providing sufficient feeding stuffs." p. 251.
(ZA SOCIALISTICKE ZEMEDLSTVI, Vol. 2, no. 3, Mar. 1952, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions, L.C., Vol. 2 No. 7, July 1953, Uncl.

KLECKA, A.

Relation between science and practice. p. 489. Feat and its use in socialist agricultural production. p. 489. (ČASOPIS LÉKARŮ ČESKÝCH, Vol. 92, #25, June 1953, Czechoslovakia)

SO: Monthly List of East European Accessions, Vol. 2 #8, Library of Congress,
August 1953, Incl.

KLECKA, A.

Our science has to propose only those results and experiences which are applicable in praxis.

p. 231

Vol. 3, no. 5, 1956

BESEDA VENKOVSKÉ RODINY

Praha

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSION (EAL) LC, Vol. 5, no. 12,
December 1956

KLECKA, A.

Tasks of agricultural science in the second Czechoslovak Five-Year Plan. p. 394.

VESTNIK. Vol. 3, no. 8/9, 1956

Praha, Czechoslovakia

SOURCE: East European List (REAL) Library of
Congress, Vol. 6, No. 1, January 1957

KLECKA, A.

Main tasks of the Czechoslovak Academy of Agriculture in the efforts to increase efficiency in agriculture. p. 170. (VESTNIK. Praha) (Vol. 4, no. 4, 1957)

SO: Monthly List of East European Accession (KEAL) IC, Vol. 6, No. 7, July 1957. Uncl.

KLECKA, A.

For a higher efficiency in the scientific research of the Czechoslovak Academy of Agricultural Sciences. p. 226. (VESTNIK, Vol. 4, No. 5/6, 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

KLECKA, A.

A closing word. p. 283. (VESTNIK, Vol. 4, No. 5/6, 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, VOL. 6, No. 12, Dec 1957. Uncl.

KLECKA, A.

Fodder problems in Czechoslovakia. p. 332. (VESTNIK, Vol. 4, No. 7/3, 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

KLECKA, A.

"Soviet agricultural science and its importance for our agriculture."

p. 578 (VESTNIK. -- Praha, Czechoslovakia.) Vol. 4, No. 11/12, 1957

SO: Monthly Index of East European Accession (EEAI) LC, VOL. 7, NO. 5, May 1958

KLECKA, A.

"Final speech at the annual meeting of the Czechoslovak Academy of Agricultural Sciences"

Vestnik. Praha, Czechoslovakia. Vol. 5, special issue, 1958

Monthly list of East European Accessions (KEAT), LC, Vol. 8, No. 6, Jun 59, Unclass

KLECKA, A.

"Present and future tasks of agricultural science"

Vestnik. Praha, Czechoslovakia. Vol. 5, special issue, 1958

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclass

KLECKA, A.

"Anniversary plenary session of the All-Union Lenin Academy of Agriculture."

P. 2. (Vestnik. --Praha, Czechoslovakia.) Vol. 5, no. 1, 1958.

The plan of the scientific research for 1958. P. 7

Conference on the improvement of the quality of potatoes. P. 11.

SO: Monthly Index of East European Accession (KEAI) LC, Vol. 7, No. 5, May 1958

KLECKA, A.

"Basic problems relevant to the agricultural production in mountainous and submountainous areas."

p. 174 (Vestnik, Vol. 5, no. 4, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,
September 1958

KLECKA, A.

"Ten years in the development of socialist agricultural and forest science."

p. 198 (Vestnik, Vol. 5, no. 4, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. no. 9,
September 1958

KLICKA, A.

"Some basic problems of Michurin's agrobiolgy."

VESTNIK. Praha, Czechoslovakia, Vol. 5, No. 7/8, 1958.

Monthly List of East European Acquisitions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

KLECHKA, Antonin, akademik [Klečka, Antonín]

Present-day problems of agricultural theory and practice in Czechoslovakia. Agrobiologia no.5:658-676 8-0 '60. (MIRA 13:10)

1. President Czechoslovakской akademii sel'skokhozyaystvennykh nauk.

(Czechoslovakia--Agriculture)

KLECKA, Antonin, akademik

Sources of Darwin's work, the development of Darwinism and its evolution into the Soviet creative Darwinism. Vestnik CSAZV 7 no.1/2:7-25 '60. (EEAI 9:7)

1. Predseda Ceskoslovenskie akademie zemědělských věd.
(Darwin, Charles Robert) (Evolution)
(Communism)

KLECKA, Antonin, akademik

Important tasks of the Czechoslovak Academy of Agricultural Sciences.
Vestnik CSAZV 7 no.1/2:78-83 '60. (EEAI 9:7)

1. Predseda Ceskoslovensko akademie zemědělských věd.
(Czechoslovakia--Agriculture)

KLECKA, Antonin, akademik; Koubek, Karel, akademik; FOLTYN, Jiri; SCHOLZ, Jaromir, akademik; LANDAU, Ladislav

Contemporary problems of agricultural science and practice; also, remarks by Karel Koubek, Jiri Foltyn, Jaromir Scholz and Ladislav Landau. Vestnik CSAZV 7 no.6/7:312-331, 361-369 '60. (KEAI 9:10)

1. Predseda Ceskoslovenske akademie zemedelskych ved (for Klecka).
 2. Predseda II. odboru Ceskoslovenske akademie zemedelskych ved (for Koubek).
 3. II. mistopredseda Ceskoslovenske akademie zemedelskych ved (for Foltyn).
 4. Dopisujici clen Ceskoslovenske akademie zemedelskych ved (for Foltyn and Landau).
 5. Reditel Vyskumneho ustavu pro chov drubese, Ivanka pri Dunaji (for Landau)
- (Czechoslovakia--Agriculture)

KLECKA, Antonin, akademik

Evaluation of the 16th Plenary Meeting of Czechoslovak Academy of
Agricultural Sciences. Vestnik CSAZV 7 no.6/7:371-374 '60. (KEAI 9:10)

1. Predseda Ceskoslovenske akademie zemedelskych ved.
(Czechoslovakia--Agriculture)

KLECKA, Antonin, akademik.

Statement on the role and tasks of agricultural sciences in the period of an advanced stage of building up socialism; also, remarks by Ivan Brauner and others. Vestnik CSAZV 8 no.2/3:65-162 '61.
(KEAI 10:5)

1. Predseda Ceskoslovenske akademie zemedelskych ved; clen redakcni rady Vestniku Ceskoslovenske akademie zemedelskych ved.
(Czechoslovakia--Agriculture)

KLECKA, Antonin, akademik

Organisation and methods of scientific soil research. Vestnik
CSAZV 8 no.6:332-350 '61. (EEAI 10:9)

1. Predseda Ceskoslovenske akademie zemedelskych ved.

(Soil research)

KLECKA, Antonin, akademik

Some urgent and prospective tasks of the Czechoslovak Academy of Agricultural Sciences for raising the agricultural production to the level of industry. Vestnik CSAZV 8 no.8/9:454-483 '61.

1. Predseda Ceskoslovenske akademie zemedelskych ved; clen redakcni rady Vestniku Ceskoslovenske akademie zemedelskych ved.

(Czechoslovakia—Agriculture)

KLECKA, Antonin, akademik

Evaluation of the 18th General Assembly of the Czechoslovak Academy of Agricultural Sciences. Vestnik CSAZV 8 no.8/9:532-537 '61.

1. Predseda Ceskoslovenske akademie zemedelskych ved; clen redakcni rady Vestniku Ceskoslovenske akademie zemedelskych ved.

(Czechoslovakia--Agriculture)

KLECKER, Alois, ins.

Surveying the position of test wells by means of magnetic orientation. Geod kart obsor 8 no.11;212-213 W '62.

1. SO, Prerov.

PAVLAT, Bretislav; ZUREK, Oldrich; KLECKA, Antonin

Technology of large and complex molds for steel castings.
Slevarenstvi 10 no.8:295-300 Ag '62.

1. Viskovické sešezarmy Klementa Gottwalda.

KIECKA, Antonin, akademik

Academician Jiri Kotatko; obituary. Vostnik G3AZV 9
no.3:175-176 '62.

KLECKA, Antonin, akademik

Some problems of plant research and production from the viewpoint of the 12th Congress of the Communist Party of Czechoslovakia. Rost výroba 9 no.3/4:213-222 Mr-Apr '63.

L 36276-66 EEC(k)-2/FSS-2 TT/OW

ACC NR: AP6004719

(A)

SOURCE CODE: CZ/0089/65/000/001/0016/0019

AUTHOR: Klecka, Jiri (Major of Engineers, Candidate of sciences)

58
B

ORG: none

TITLE: Strategic rockets

SOURCE: Vojenska technika, no. 1, 1965, 16-19

TOPIC TAGS: rocket, rocket warhead, rocket guidance, contamination, missile vulnerability

ABSTRACT: Soviet strategic rockets may carry thermonuclear warheads up to the equivalent of 100 megatons of TNT. The explosion of one such warhead can destroy an area of several tens of square kilometers and contaminate a much larger area with a lethal concentration of radioactive fallout. The accuracy of Soviet strategic rockets has been proved during their test firings in the Pacific Ocean; the maximum deviation at a range of 12,000--15,000 km was 1500 m. Orig. art. has: 5 figures and 1 table.

[KP]

SUB CODE: 19, 15/ SUBM DATE: none

Card 1/1

KLECKA, L.

Klecka, L.

For a timely and economical hay harvest, for a quick conclusion of interrow cultivation. p. 177.

Vol. 5, no 10, May 1955
MECHANISACE ZEMEDILSTVI

SO: Monthly List of East European Accession, (KEAL), LC, Vol. 4, No. 9,
Sept. 1955, Uncl.

KLECKA, L.

Organization of fenced-in pastures on the Ostrov Collective Farm. p. 32.
(ROLNICKE HLASY, Vol. 10, No. 7, July 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

KLECKA, L.

The harvesting of hay.

P. 35, (Rolnické Hlasy) Vol. 30, no. 4, Aug. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EKAI) Vol. 6, No. 11 November 1957

Z/032/60/010/010/001/002
E073/E535

AUTHORS: Prnka, T. Engineer and Klečka, R.
TITLE: New Machine^W for Long Duration Creep Tests at Elevated Temperatures
PERIODICAL: Strojirenství, 1960, Vol.10, No.10, pp.778-781

TEXT: A new machine has been developed for creep testing of materials at high temperatures which satisfies present-day requirements. It is claimed to be the only creep testing machine with a load exceeding 1000 kg produced on an industrial scale. The machine is suitable for accurate measurement of the changes in the deformation during the tests, which is necessary for determining the creep limits $\sigma_T 0.2$, $\sigma_T 0.5$ and $\sigma_T 1\%$, as well as for testing until failure for the purpose of determining the ultimate strength under creep conditions. The data of the machine are as follows: maximum load 3250 kg; loading accuracy better than 1%; maximum test temperature 900°C; accuracy of measuring the deformation ± 0.001 mm; accuracy of the temperature regulation $\pm 2^\circ\text{C}$ in the entire temperature range; measurement of the temperature with an accuracy of 1°C ; weight 390 kg without the load; required floor space 0.57 m².

Card 1/3

Z/032/60/010/010/001/002
E073/E535

New Machine for Long Duration Creep Tests at Elevated Temperatures
maximum height 2115 mm; testing is possible of a single test specimen (with the dimensions as shown in Fig.4) measuring its deformation until fracture or of three test specimens (of dimensions as shown in Fig.5) until fracture. The machine and the test method are in accordance with the appropriate ISO specifications. Figs. 1 and 2 show photographs of the machine, which is so designed that two of the machines (one righthand one and one lefthand one) can be placed close together, one thermostat being used for both machines. A single voltage-stabilizer is sufficient for five to six machines and a single temperature-recorder can be used for six machines. The clamping of the specimens during the tests in which the rate of deformation is measured is shown by the line drawing, Fig.6, which also shows the location of the contact thermocouples for measuring the temperature of the specimen at its centre and at two points 40 mm from the centre. The clamping of the specimens for testing the ultimate strength at creep temperatures is shown in the line drawing, Fig.7. A new instrument is incorporated for measuring the elongation of the test specimen with an accuracy of ± 0.001 mm

Card 2/3

Z/032/60/010/010/001/002
E073/E535

New Machine for Long Duration Creep Tests at Elevated Temperatures at temperatures up to 900°C (X - Fig.1, Figs. 6 and 8). The temperature control is to be improved by using a magnetic amplifier. There are 8 figures and 20 references: 4 Czech, 2 Soviet, 3 German, 10 English and 1 International.

ASSOCIATION: Výzkumný ústav VŽKG, Ostrava (Research Institute,
VŽKG, Ostrava)

Card 3/3



KLECKOVA, M., ins.

Heat radiation between coaxial rotating surfaces.
Strojirenstvi 12 no. 10:737-743 10 0 '62.

1. Statni vyzkumny ustav tepelne techniky, Praha.

KLECKOVA

KRATOCHVILLOVA, Vera; KLECKOVA, Eva; DRABOVA, Marie

Problem of sulfonamide-resistance in Shigella. Cesk. epidem. mikrob.
immun. 6 no.5:337-338 Sept 57.

1. Ustav epidemiologie a mikrobiologie, reditel prof. Dr. Karel Baska.
(SHIGELLA DYSENTERIAE, effect of drugs on,
sulfonamides, resist. (Ox))
(SULFONAMIDES, effects,
on Shigella dysenteriae, resist. (Ox))

KLECKOVA-ALDOVA, Eva (Praha XII, Šrobárova 48.)

Bulgarian microbiology, Česk. epidem. mikrob. imun. 7 no.2:140-142 Mar 58.

1. AKTIVNOSTI KE ZAHRAŇICI.
(MICROBIOLOGY,
in Bulgaria (Cs))

KLECKOVA-ALDOVA, Eva

~~Hemagglutination~~ in dysentery. Cesk. epidem. mikrob. immu. 7 no.3:
188-192 May 58.

1. Ustav epidemiologie a mikrobiologie v Praze.
(DYSENTERY, BACILLARY, immunology,
hemagglut. reaction (Cs))
(HEMAGGLUTINATION, in var. dis.
dysentery, bacillary (Cs))

KLECKOVA-ALDOVA, E.; JELINEK, J.

Certain current aspects of epidemiology, therapy and prevention of bacillary dysentery. I. Sulfonamide-resistance of Shigella. Cesk. epidem. mikrob. imun. 8 no.3:157-167 May 59.

1. Ustav epidemiologie a mikrobiologie v Praze.
(SHIGELLA, eff. of drugs on,
sulfonamides, resist. (Cs))
(SULFONAMIDES, eff.
on Shigella, resist. (Cs))

KLECKOVA-ALDOVA, Eva; za technicke spoluprace E. Zelene

On certain current problems of epidemiology. Therapy and prevention of bacillary dysentery. II. Isolation of a rare type of *Shigella flexneri* in Czechoslovakia. *Cesk. epidem. mikrob. imun.* 9 no.4:229-230 Je '60.

1. Ustav epidemiologie a mikrobiologie v Praze.
(NO SUBJECT HEADING)